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EXAMINER

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Paper No. 18

Application Number: 09/658,907
Filing Date: September 11, 2000
Appellant(s): KOHL ET AL.

Gene L. Tyler
For Appellant

EXAMINER'S ANSWER

MAILED

OCT 31 2002

GROUP 3700

This is in response to the appeal brief filed 09/11/02.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that claims 1 - 20 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

The rejection of claims 1, 2, 4 - 8, 10, 14, 16 - 18 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

The rejection of claims 11, 12, 19 and 20 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

The rejection of claims 3 and 15 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

4,635,723	SPIVEY	01-1987
4,721,158	MERRITT, JR. ET AL.	01-1988
4,665,981	HAYATDAVOUDI	05-1987
4,354,553	HENSLEY	10-1982
5,706,896	TUBEL ET AL.	01-1998

Johnson et al., WO 98/57030, Control and monitoring system for chemical treatment of an oilfield well, 17 December 1998.

It is noted that the TUBEL et al. reference (US 5,706,896) has been applied in the office action dated 12/10/2001 at which time the TUBEL et al. reference (US 6, 006,832) cited by the appellant was not of record. Thus, the TUBEL et al. reference cited by the appellant (US 6,006,832) has not been relied upon as a reference in the rejection.

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 2, 4 – 8, 10, 14, 16 - 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spivey in view of Merritt, Jr. et al.. and further in view of Hensley.

Spivey discloses a system for a controlled injection of corrosion inhibiting additive to a production well (60), the system comprising a source of additive (13), a pump (30), a flow meter (35, 39) that generates appropriate signals via transmitters (36, 40) to a microprocessor based first controller (53) that controls a solenoid operated valve (46) to ensure a desired amount of additive to be injected into the well (60). The controller (53) needs to be programmed (Col. 4, lines 51 – 55) which presumably involves an operator and thus via suitable programming the system is inherently capable of being manually overridden with previously programmed values.

The patent to Spivey discloses the claimed invention with the exception of (a) having a second controller that remotely controls the first controller to deliver a desired amount of additive into the well and (b) the system controlling a plurality of well bores.

Merritt, Jr. et al. discloses a control system wherein a remote controller (40) controls a first controller (35) to deliver a desired amount of additive into the well. Merritt, Jr. et al. discloses that it is known in the art to set the flow rate of the additive to be within a predetermined range and to adjust the flow rate if the measured flow rates fall outside of the set range (Col. 4, lines 35 – 56). Merritt, Jr. discloses details of controlling a plurality of well bores.

It would have been obvious at the time the invention was made to one of ordinary skill in the art to (a) have added a second controller at a remote location to the system of Spivey to be able to control the first controller from a remote location to deliver a desired amount of additive into the well, and (b) adapt the flow control/delivery system to work with a plurality of wells as recognized by Merritt, Jr. et al.

The turbine flow meter disclosed by Merritt, Jr. et al. is considered to be a positive displacement flow meter. Also, the onsite controller (35) has associated with it, a database management system comprising computer programs and historical performance data (col. 4 in Merritt, Jr. et al.) that could be easily shared with the second controller (40). Thus, the limitation of the database management system being associated with the second controller as recited in claim 8 is merely a design choice over those features disclosed in the combination of Spivey and Merritt, Jr. et al. that provides no new and / or unexpected results nor solves any stated problem.

The system according to Spivey – Merritt, Jr. et al. combination as set forth above discloses the claimed limitations with the exception of supplying the additive such that its concentration in the formation fluid is within the range of 1 ppm to about 10,000 ppm. The patent to Hensley discloses that it is known in the art (see Col. 5, example 1) to use additives that result in an additive concentration in the formation fluid of about 230 ppm (which is well within the range claimed) to achieve desired corrosion inhibition. It would have been obvious to one of ordinary skill in the art at the time the invention was made to supply the additive such that its concentration in the formation fluid is within the range of 1 ppm to about 10,000 ppm for the purpose of achieving desired corrosion inhibition.

It is also noted that the Spivey – Merritt, Jr. et al. - Hensley combination as set forth above is capable of performing the method recited in claims 16 – 18.

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Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Spivey – Merritt, Jr. et al. - Hensley combination as applied to claims 1, 2, 4 – 8, 10, 14, 16 - 18 above, and further in view of Tubel et al. (US 5,706,896).

The system according the combination of Spivey, Merritt, Jr. et al. and Hensley as set forth above, discloses all the claimed features with the exception of having the second remote controller being adapted to communicate with a plurality of computers over a network. The patent to Tubel et al. discloses (Fig. 4) that it is known in the art to employ a host computer ((10, Fig. 4) that is adapted to communicate with a plurality of computers over a network for the purpose of controlling wells located over a plurality of platforms. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in the system according to the combination of Spivey, Merritt, Jr. et al. and Hensley a host computer that is adapted to communicate with a plurality of computers over a network for the purpose of controlling wells located over a plurality of platforms as recognized by Tubel et al..

Claims 11, 12, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Spivey – Merritt, Jr. et al. - Hensley combination as applied to claims 1, 2, 4 – 8, 10, 14, 16 - 18 above, and further in view of Hayatdavoudi.

The system according the combination of Spivey, Merritt, Jr. et al. and Hensley as set forth above discloses all the claimed features with the exception of having a sensor measuring a characteristic of the formation fluid and altering the supply of a selected additive in response to the measured characteristic. The patent to Hayatdavoudi discloses that it is known in the art to employ a sensor (38) for the

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purpose of monitoring the corroding property of the formation fluid and the measured characteristic is used to alter the supply of the additive from the reservoir (56). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in the system according the Spivey-Merritt, Jr. et al. – Hensley combination a sensor for measuring a characteristic of the formation fluid and altering the supply of a selected additive in response to the measured characteristic for the purpose of selectively controlling the injection of the additive as recognized by Hayatdavoudi.

It is also noted that the Spivey – Merritt, Jr. et al. – Hensley - Hayatdavoudi combination as set forth above is capable of performing the method recited in claims 19 and 20.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Spivey – Merritt, Jr. et al. – Hensley combination as applied to claims 1, 2, 4 – 8, 10, 14, 16 - 18 above, and further in view of Pearson.

The system according the combination of Spivey, Merritt, Jr. et al. and Hensley as set forth above discloses all the claimed features with the exception of having redundant flow control devices that are controlled by an onsite controller. The patent to Pearson discloses that it is known in the art to employ redundant flow control devices (36) controlled by an onsite controller (54) for the purpose of obtaining assured supply of additive into the well. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in the system according to the Spivey -Merritt, Jr. et al. - Hensley combination redundant flow control devices for the

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purpose of obtaining assured supply of the additive into the well as recognized by Pearson.

Claims 3 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Spivey – Merritt, Jr. et al. - Hensley combination as applied to claims 1, 2, 4 – 8, 10, 14, 16 - 20 above, and further in view of Johnson et al. (WO 98/57030).

The system according the combination of Spivey, Merritt, Jr. et al. and Hensley as set forth above, discloses all the claimed features with the exception of having injection of additives at pre-determined depths. The published disclosure of Johnson et al. discloses (Fig. 3) that it is known in the art to employ injection of additive at predetermined depths for the purpose of achieving desired properties of the formation fluid. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in the system according to the combination of Spivey, Merritt, Jr. et al. and Hensley, means for injecting the additive at a pre-determined depth for the purpose of achieving desired properties of the formation fluid as recognized by Johnson et al..

It is noted that Johnson et al. discloses (Fig. 6) the injection of additives into a surface-processing unit in addition to injection into the wellbore. Such surface treatment units provide further treatment of the produced fluid such as separation of water in emulsion from oil and gas, etc.

(11) Response to Arguments

Issue 1:

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This issue has been rendered moot by withdrawal of rejections of claims 14 and 15 under 35 U.S.C. 112 , second paragraph.

Issue 2:

Applicant's argument concerning the applicability of Merritt, Jr. et al. to the claims of the instant invention in that the reference of Merritt, Jr. et al. is non-analogous is unpersuasive. Merritt, Jr. et al. discloses a fluid injection control system for controlling the injection of fluids –which could include (Col. 3, lines 21 – 24) a variety of chemicals. For controlling the injection of such fluids, Merritt, Jr. et al. discloses (Col. 3, line 67 – Col. 4, line 4) the use of a host computer i.e. a second remote controller for (a) monitoring purposes, (b) application program alteration purposes such as changing desired flow rates, etc. Just as the device claimed by the applicants adds fluid to the well bore, so too does the device of Merritt, Jr. et al., by adding an additive, as at 12, to the formation fluid. While “flooding” may be mentioned, it is clear that fluid at 12 is added to the wellbore production fluid. Such added fluid clearly treats the wellbore fluid as an additive would. Thus the Merritt, Jr. et al. reference is in the filed of appellant's endeavor (i.e. injection of additive into a well) and is also pertinent to the particular problem with which the appellant is concerned, that is, the use of a second remote controller for communicating with a first controller to transmit any desired changes in operational parameters. See *In Re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992).

Further, the argument that the “additive” of the instant invention is not the same as the injected fluid in Merritt, Jr. et al. is unpersuasive. As claimed, an “additive” is

merely fluid added to the fluid in a well to enhance production. In a like vein, in Merritt, Jr. et al. fluid at 12 is injected into the well to enhance the production of the fluid from the well.

Regarding the argument concerning the flow metering disclosed in Spivey, it is the examiner's position that the flow meter in the combination corresponds to that disclosed by Merritt, Jr. et al. which is a positive displacement flow meter. Merritt, Jr. et al. happens to disclose the use of a positive displacement flow which is capable of measuring the flow rates required to achieve the desired concentration of the additive(s) although the flow rates in Merritt, Jr. et al could potentially be higher than those in the disclosure of the appellant.

Declaration of Commercial/Financial success

Regarding the secondary evidence related to financial success of the claimed invention, a specific affidavit concerning the financial success was not submitted with the response dated March 11, 2002. On page 12 of the response dated March 11, 2002, the applicants merely offered to provide such evidence.

The declaration of financial success submitted as part of Appellant's brief in Appendix B has been considered but the declaration is unpersuasive because the applicant has failed to establish a nexus between the claimed invention and the evidence of commercial success. It is also noted that gross sales figures do not show commercial success absent evidence as to market share, *Cable Electric Products, Inc. v. Genmark, Inc.*, 770 F.2d 1015, 226 USPQ 881 (Fed. Cir. 1985). See MPEP § 716.03.

Issue 3:

Regarding the TUBEL et al. reference, appellant's arguments are unpersuasive in that clearly Tubel et al. discloses a system adapted to controlling and/or monitoring a plurality of wellbores. The teaching of Tubel et al. that is relevant is the use of means for controlling wells from a remote location. Additionally it is noted here that TUBEL et al. reference has a publication date of January 1998 and not December 1999 as argued. Thus the TUBEL et al. reference is valid prior art. The TUBEL et al. reference is US 5,706,896 that was included in the Information Disclosure Statement filed as paper no. 13 on 09/18/01 and has been consistently applied in rejecting claim 9 since the first rejection in this case dated 12/10/01.

Issue 4:

In regard to the HAYATDAVOUDI reference, it is the examiner's position that this reference is a teaching reference for the teaching it provides on the use of a sensor to measure a characteristic, in this case a corroding property, of the formation fluid and using that measurement to alter the supply of the additive. Claims 11, 12, 19 and 20 recite **a sensor** for measuring **any** from a group of characteristics of the formation fluid. Thus appellant's arguments regarding the HAYATDAVOUDI reference are unpersuasive.

Issue 5:

Regarding the PEARSON reference, it is the teaching it provides on the use of redundant pumps (36) i.e. flow control devices controlled by an on-site controller (54) that is of relevance to the rejection. It is noted that Claim 13 recites, broadly, "redundant flow control devices". In this regard, it is noted that the courts have held that mere

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duplication of parts has no patentable significance unless a new and unexpected result is produced. See *In Re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Issue 6:


In regard to the JOHNSON et al. reference, the appellants offer no arguments related to the specific use of JOHNSON et al. in the rejection of Claims 3 and 15. Claim 3 merely recites injecting additives to a wellbore at a selected location and claim 15 recites injecting additives to a plurality of wellbores at predetermined depths. Furthermore, choosing a particular to depth to inject additives in a given wellbore or in a plurality of wellbores is clearly dictated by the characteristics of the formation fluid in that wellbore and therefore represents a design choice.

In response to appellant's general argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

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For the above reasons, it is believed that the rejections should be sustained.


Respectfully submitted,


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October 30, 2002

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